

WE CLAIM:

1. An antimicrobial medical article prepared by treating a polymeric medical article, for an effective period of time, with a solution consisting essentially of one or more solvents and a mixture of chlorhexidine free base and a water-soluble chlorhexidine salt, wherein the weight/weight ratio of chlorhexidine free base and the water-soluble chlorhexidine salt in the solution is between 1:1 to 1:5.

2. The antimicrobial medical article of claim 1, wherein the ratio is 1:1.

3. The antimicrobial medical article of claim 1, wherein the solvent is selected from the group consisting of water, alcohol, tetrahydrofuran, dimethylsulfoxide, dimethylformamide, N-methyl-2-pyrrolidone, and mixtures thereof.

4. The antimicrobial medical article of claim 3, wherein the solvent is a mixture of between 10 and 30 percent (volume/volume) tetrahydrofuran and 70 and 90 percent (volume/volume) ethanol.

5. The antimicrobial medical article of claim 7, wherein the solvent is a mixture of 20 percent (volume/volume) tetrahydrofuran and 80 percent (volume/volume) ethanol.

6. The antimicrobial medical article of claim 3, wherein the solvent is a mixture of between 75 and 95 percent (volume/volume) tetrahydrofuran and 5 and 25 percent (volume/volume) methanol.

7. The antimicrobial medical article of claim 6, wherein the solvent is a mixture of about 85 percent (volume/volume) tetrahydrofuran and 15 percent (volume/volume) methanol.

1 8. The antimicrobial medical article of claim 1, wherein the article is  
2 a hydrophilic polymeric medical article.

1 9. The antimicrobial medical article of claim 8, wherein the article is  
2 a catheter.

1 10. The catheter of claim 9, wherein the catheter has a lumen which is  
2 treated, for an effective period of time, with the solution consisting essentially of one or  
3 more solvents and the mixture of chlorhexidine free base and water-soluble chlorhexidine  
4 salt.

1 11. The medical article of claim 8, wherein the water-soluble  
2 chlorhexidine salt is chlorhexidine diacetate.

1 12. The catheter of claim 9, wherein the water-soluble chlorhexidine  
2 salt is chlorhexidine diacetate.

1 13. The catheter of claim 10, wherein the water-soluble chlorhexidine  
2 salt is chlorhexidine diacetate.

1 14. The antimicrobial medical article of claim 1, wherein the article is  
2 a hydrophobic polymeric medical article.

1 15. The antimicrobial medical article of claim 14, wherein the article is  
2 expanded polytetrafluoroethylene.

3 16. The antimicrobial medical article of claim 14, wherein the article is  
4 a polytetrafluoroethylene soft tissue patch.

17. An antimicrobial medical article prepared by treating a polymeric medical article, for an effective period of time, with a solution consisting essentially of

- (1) one or more solvents;
- (2) a mixture of chlorhexidine free base and a water-soluble chlorhexidine salt; and
- (3) one or more of (i) an organic acid, at a concentration of between 0.1 and 5 percent; (ii) an anti-inflammatory agent, at a concentration of between 0.1 and 5 percent; or (iii) a hydrogel at a concentration of between 0.5 to 10 percent,

wherein the weight/weight ratio of chlorhexidine free base and the water-soluble chlorhexidine salt in the solution is between 1:1 to 1:5.

18. The antimicrobial medical article of claim 17, wherein the concentration of organic acid in the solution is between 0.1 and 2 percent.

19. The antimicrobial medical article of claim 17, wherein the concentration of anti-inflammatory agent is between 0.1 and 1 percent.

20. The antimicrobial medical article of claim 17, wherein the concentration of hydrogel in the solution is between 1 and 5 percent.

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21. A method of preparing a medical article comprising the steps of

- (i) placing the medical article in a solution consisting essentially of
  - (a) a solvent selected from the group consisting of water, reagent alcohol, tetrahydrofuran, dimethylsulfoxide, dimethylformamide, N-methyl-2-pyrrolidone, and mixtures thereof; and
  - (b) a mixture of chlorhexidine free base and a water-soluble chlorhexidine salt, wherein the weight/weight ratio of chlorhexidine free base and water-soluble chlorhexidine salt in the solution is between 1:1 to 1:5;
- (ii) soaking the medical article in the solution for an effective period of time to allow the medical article to swell;
- (iii) removing the medical article from the solution; and

(iv) drying the medical article.

/ 22. A method of preparing a catheter having a lumen comprising the steps of

(i) exposing the lumen of the catheter to a solution consisting essentially of (a) a solvent selected from the group consisting of water, reagent alcohol, tetrahydrofuran, dimethylsulfoxide, dimethylformamide, N-methyl-2-pyrrolidone, and mixtures thereof; and (b) a mixture of chlorhexidine free base and a water-soluble chlorhexidine salt, wherein the weight/weight ratio of chlorhexidine free base and water-soluble chlorhexidine salt in the solution is between 1:1 to 1:5;

(ii) filling the lumen of the catheter with the solution for an effective period of time to allow the lumen of the catheter to swell;

(iii) removing the solution from the lumen of the catheter; and

(iv) drying the catheter.